

ABSTRACT

According to one embodiment a computer method and apparatus for causing a computer to perform a speculative read re-ordered load is disclosed. A speculative read re-ordered load instruction is inserted into the instruction sequence to optimize the code. Memory conflict information representing the speculative read re-ordered load is stored. When a later potentially conflicting load is executed, its physical address is matched against the physical address of the stored memory conflict information. If the potentially conflicting load has a matching physical address and a different value than the stored memory conflict information representing the speculative read re-ordered load, then the stored memory conflict information is invalidated.